Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claims 1-2 (Previously cancelled)

3. (Currently amended) A system operative to detect a damage feature in a thin wall structure, said system comprising:

an array of piezoelectric wafer sensors embedded on said structure in a predetermined pattern;

a generator operative to excite at least one of said sensors to produce tuned ultrasonic guided waves having a frequency of at least about 200 KHz in said structure; and

a signal processor operative to process received signals reflected from said damage feature at ~~least two of said sensors~~ said at least one sensor so as to detect said damage feature via a pulse-echo technique.

4. (Currently amended) A system ~~as set forth in claim 3,~~ operative to detect a damage feature in a thin wall structure, said system comprising:

an array of piezoelectric wafer sensors embedded on said structure in a predetermined pattern;

a generator operative to excite at least one of said sensors

to produce ultrasonic waves having a frequency of at least about 200 KHz in said structure, said generator ~~is~~ being operative to excite each of said sensors in said array in round-robin fashion; and

a signal processor operative to process received signals at least two of said sensors so as to detect said damage feature.

5. (Previously added) A system as set forth in claim 4, wherein said signal processor is operative to determine a location of said damage feature based on a collection of data representing received signals at a plurality of said sensors after round-robin excitation of all of said sensors in said array.

6. (Previously added) A system as set forth in claim 4, wherein said array comprises at least four of said sensors.

7. (Previously added) A system as set forth in claim 3, wherein said frequency of said ultrasonic waves include a significant component at approximately 300 KHz.

8. (Previously added) A system as set forth in claim 7, wherein said ultrasonic waves are Lamb waves.

9. (Previously added) A system as set forth in claim 3, wherein said frequency of said ultrasonic waves falls in the megahertz range.

10. (Previously added) A system as set forth in claim 3, wherein said ultrasonic waves are Lamb waves.

11. (Previously added) A system as set forth in claim 10, wherein said sensors are adhered to a surface of said thin wall structure.

12 (Previously added) A system as set forth in claim 3, wherein said wafer sensors have a planar surface area no greater than approximately 169 mm^2 and a thickness no greater than approximately 0.49 mm.

13. (Previously added) A system as set forth in claim 12, wherein said wafer sensors are generally rectangular.

14. (Previously added) A system operative to detect a damage feature in a structure, said system comprising:

an array of piezoelectric wafer active sensors embedded on said structure in a predetermined pattern, said wafer sensors having a planar surface area no greater than approximately 169 mm^2 and a thickness no greater than approximately 0.49 mm;

a generator operative to excite each of sensors in said array in round-robin fashion to produce ultrasonic waves in said structure; and

a signal processor operative to process received signals at least two of said sensors so as to detect said damage feature.

15. (Previously added) A system as set forth in claim 14, wherein said signal processor is operative to determine a location of said damage feature based on a collection of data representing received signals at a plurality of said sensors

after round-robin excitation of all of said sensors in said array.

16. (Previously added) A system as set forth in claim 14, wherein said array comprises at least four of said sensors.

17. (Previously added) A system as set forth in claim 14, wherein said frequency of said ultrasonic waves falls in a range of 200 kHz to high megahertz.

18. (Previously added) A system as set forth in claim 17, wherein said frequency of said ultrasonic waves is approximately 300 KHz.

19. (Previously added) A system as set forth in claim 18, wherein said ultrasonic waves are Lamb waves.

20. (Previously added) A system as set forth in claim 14, wherein said sensors are adhered to a surface of said thin wall structure.

Please cancel claims 21-27.

28. (Previously added) A method of detecting a damage feature present within a predetermined sensing zone in a thin wall structure, said method comprising steps of:

(a) providing at least one piezoelectric wafer sensor embedded on said structure;

(b) exciting said sensor with a first electrical signal spanning a predetermined frequency range;

(c) deriving first data characteristic of a drive-point

impedance of said wafer sensor as embedded on said structure;

(d) exciting said sensor with a second electrical signal spanning said predetermined frequency range;

(e) deriving second data characteristic of said drive-point impedance of said wafer sensor; and

(f) comparing said first data and said second data.

29. (Previously added) A method as set forth in claim 28, wherein a plurality of said wafer sensors are provided on said structure in an array.

30. (Previously added) A method as set forth in claim 29, wherein said sensors are arranged in said array so as to have overlapping sensing zones.

31. (Previously added) A method as set forth in claim 30, wherein said wafer sensors have a planar surface area no greater than approximately 169 mm^2 and a thickness no greater than approximately 0.49 mm.